ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

8. Analysis

1991 MS Classification: 30D35, 30D40, 30D45
Pavićević, Žarko, University of Montenegro, Yugoslavia
Meromorphic Functions Generating Normal Families in an Arbitrary Open Subset of the Unit Disk, With Respect to Any Subgroup of the Group of Conformal Automorphisms of the Unit Disk
In this work, in the terms of growth of the spherical derivative, of the quotient of the area and the Nevanlinna characteristic function in the Ahlfors-Shimizu form, we give several necessary and sufficient conditions for a meromorphic function in the unit disc Δ to be normal in an arbitrary open subset of Δ, with respect to any subgroup of the group of all conformal automorphisms of Δ. We found regions of normality of meromorphic function in the disc Δ with respect to arbitrary subgroup. We also investigate boundary behaviour of these functions.